

SOUTHAMPTON  
PORT SANITARY AUTHORITY.

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THE FIFTH  
ANNUAL REPORT  
ON THE  
SANITARY CONDITION  
OF THE  
PORT OF SOUTHAMPTON,  
For the Year 1896,

BY  
A. WELLESLEY HARRIS,  
M.R.C.S. Eng., L.S.A., D.P.H.,

*Medical Officer of Health to the County Borough and Port of Southampton.*

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# SOUTHAMPTON PORT SANITARY AUTHORITY.

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## ANNUAL REPORT FOR THE YEAR ENDING DECEMBER 31st, 1896.

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TO THE MAYOR, ALDERMEN, AND COUNCILLORS  
OF THE  
COUNTY BOROUGH OF SOUTHAMPTON.

GENTLEMEN,

In accordance with the regulations of the Local Government Board, I have the honour to present to you the Fifth Annual Report on the Sanitary Condition of the Port of Southampton for the year 1896. As in previous years the systematic inspection of vessels entering the Port has been carried out and the necessary steps taken to protect the health of the floating population, and to prevent the spread of infection to the residents of the Borough from imported cases of Infectious Disease.

The amount of Sanitary Supervision increases each year with the increased Trade of the Port, which is well illustrated in the accompanying tables.

By the Public Health Act, 1896, and the new regulations of the Local Government Board, dated November, 1896 (made in pursuance of the said Act), additional and responsible duties have been placed upon Port Sanitary Authorities which will be explained in this Report.

I am, Gentlemen,

Your obedient servant,

A. WELLESLEY HARRIS,

M.R.C.S., D.P.H., ETC.,

*Medical Officer of Health, Port of Southampton.*





# Southampton Port Sanitary Authority.—Annual Report, 1896.

## STATISTICAL.

Table A. contains the Board of Trade returns respecting passengers leaving Southampton for places out of Europe.

The Port Sanitary Authority have no responsibilities in regard to the health of such persons, save in cases where any are suspected to be suffering from an infectious disease, in which case the duty of isolating such persons falls upon the Port Sanitary Authority. An officer of the Port Sanitary Authority is in attendance upon vessels during embarkation of Emigrants.

The number of persons embarking for places out of Europe in 1896, amounted to 69,020, against 67,253 in 1895, and 21,282 in 1892.

The arrivals of Continental Aliens show a slight diminution over the preceding year.

It is impossible to obtain any reliable records of persons embarking for the Continent or Channel Islands.

Table B. This table deals exclusively with arrivals at the Port. The returns for the year 1896 shows an increase in the number of ships and passengers arriving compared with the previous year.

The total number of passengers from all countries, including crews landing, amounted to 196,677 in 1896, against 188,832 in 1895, and 97,227 in 1892. These numbers do not include troops disembarking here.

Many large vessels arrive in the river to disembark passengers ; records are taken of those landing only, and not of passengers or crews in transit.

\* TABLE A.

PASSENGERS.	1892.	1893.	1894.	1895.	1896.
Number of Passengers who left for places out of Europe ... ..	21,282	41,563	52,045	67,253	69,020
Number of Alien Passengers who arrived from the Continent as deck Passengers, or who after landing proceeded by train as third class Passengers ... ..	364	391	1,869	2,363	1,190

*\*For these figures I am indebted to the Board of Trade*

TABLE B.

RETURN OF SHIPS' TONNAGE, PASSENGER ARRIVALS, &c., FOR THE YEARS  
1892, 1893, 1894, 1895, AND 1896.

Year.	Number of Arrivals from Foreign.	Number of Arrivals from Home Ports (Coasters).	Number of Passengers arriving at the Port from Ports other than Jersey.	Number of Passengers arriving from Jersey.	Number of Crews Arriving.	Number of Ships of 2,000 Tons and upwards.	Number of Ships under 2,000 Tons.	Net Tonnage of the Vessels entering the Port.
1892	*2,128	6,256	"A." 13,690	26,890	56,647	111	1,698	2,562,549
1893	†2,221	8,609	43,391	27,581	70,614	†416	1,807	2,936,973
1894	§2,458	9,165	66,371	30,705	76,680	453	2,005	3,167,864
1895	2,501	9,443	70,334	30,500	87,998	475	1,963	3,435,938
1896	**2,614	9,818	74,310	30,274	91,867	438	2,176	3,596,945

\* (1892)—Number of Arrivals 2,128—319 of which called here without reporting; no record of Crews or Passengers remaining on board; no average possible

† (1893)—Number of arrivals 2,221—278 of which called here without reporting; no record of Crews or Passengers remaining on board; no average possible

All Passengers other than those from Jersey are included in column marked "A."; 14,607 of which arrived from the Continent of Europe.

‡ (1893)—414 from Foreign Ports; 2 from Home Ports.

§ (1894)—Number of arrivals 2,458—286 of which called here without reporting; no record of Passengers or Crews remaining on board. All Passengers other than those from Jersey are included in column marked "A."; 18,771 of which arrived from the Continent of Europe.

|| (1895)—Number of Arrivals 2,501—256 of which called here without reporting; no record of Crews or Passengers remaining on board. All Passengers other than those from Jersey are included in column marked "A."; 22,635 of which arrived from the Continent of Europe.

\*\* (1896)—Number of Arrivals 2,614—315 of which called here without reporting; no record taken of Crew or Passengers remaining on board.

All Passengers other than those from Jersey are included in column marked "A."; 22,154 of which arrived from the Continent of Europe.



All vessels arriving within the Docks are visited by the Port Sanitary Inspector on duty, who receives from the Ship's Surgeon, or Master of the Vessel, a Medical certificate upon the following form supplied by the Port Sanitary Authority.

MEDICAL CERTIFICATE  
TO  
SOUTHAMPTON PORT SANITARY AUTHORITY.

The Master of the S.S.

From what Port have you come?

Number of Crew?

Total number or Passengers?

HEALTH.

Has there been any sickness of an infectious nature during the voyage, or at time of arrival, among either Crew or Passengers?

If there has been any sickness, kindly state nature and result :

Signed ..... Surgeon

..... Master

Date ..... 189

Should the officer find any infectious disease notified upon the certificate, the passenger or person so suffering is detained, and the Port Medical Officer, who is always in telephonic communication, immediately called.

The method of isolation and subsequent disinfection is then arranged.

This arrangement has been found to act exceedingly well with regard to the less dangerous infectious diseases, such as Measles, Scarlet Fever, Typhoid Fever, and Diphtheria.

More stringent provisions are made for dealing with the more dangerous diseases, such as Small Pox, Plague, Yellow Fever, and Cholera.

In regard to the first of these, namely Small Pox, the friendly arrangements made with the Shipping Companies in 1893 still hold good, and work exceedingly well. They are : that in the event of any vessel proceeding to Southampton having a case of Small Pox on board, the Captain shall inform the Company of the fact by telegram from the last Port of call. Immediate notice is then sent to the Medical Officer stating the time of the vessel's expected arrival in Southampton Water, in order that he may make arrangements to personally board the vessel off Netley, remove the patient and his attendants in the steam ambulance to the Floating Hospital, and have the infected portions of the vessel, as well as the infected bedding, etc., disinfected before she proceeds to Dock. In no case has this measure led to serious delay, the launch staff being in readiness to leave the Dock Head immediately the vessel is telegraphed as passing Hurst. This gives ample time for the Port Medical Officer to arrive off Netley before the arrival of the infected ship. Since this arrangement has been established the introduction of Small Pox into the Town has been prevented.

The protective measures taken in regard to Plague, Yellow Fever, and Cholera, have during the year under discussion undergone a complete change, and will be best dealt with under a special heading bearing upon the new duties imposed upon the Port Sanitary Authorities by the recent regulations of the Local Government Board.

## SPECIAL REGULATIONS RELATING TO CHOLERA, YELLOW FEVER, AND PLAGUE.

Previous to the year 1896, Vessels arriving in the Port having cases of Yellow Fever or Plague on board, or coming from places in which either of these diseases had occurred, were detained by the Custom Authorities until the Vessel had been inspected by a Medical Officer appointed by the Privy Council to carry out their Quarantine Regulations.

In regard to Cholera, it was the duty of the Port Sanitary Medical Officer to visit all Vessels infected with Cholera, or arriving from places at which Cholera existed, and enforce the Regulations of the Local Government Board, dated August 28th, 1890, and September 6th, 1892, to prevent the importation of this Disease.

The entire control for the prevention of the importation of Infectious Diseases has now been placed upon Port Sanitary Authorities. By the Public Health Act, 1896, the old Quarantine Act of 1825 is repealed, and an Order of the Local Government Board, dated November 9th, 1896, containing Regulations to be observed as to Cholera, Yellow Fever, or Plague, substituted.

The main Articles of the new Order now in force are :—

*Definition of "Master," "Cholera," and "Infected."*

1.—The term "Master," used in relation to a ship, includes the officer, pilot, or other person for the time being in charge or command of the ship.

2.—The term "Cholera" includes Choleraic Diarrhœa.

3.—The term "Infected" means infected with Cholera, Yellow Fever, or Plague : Provided that every ship shall be deemed infected in which there is, or has been during the voyage, or during the stay of such ship in the port of departure, or in a port in the course of such voyage, any case of Cholera, Yellow Fever, or Plague.

*Fixing Mooring Station. Compulsory Provision of Hospital Accommodation.*

Art. 6.—Every Port Sanitary Authority and every other Sanitary Authority within whose district persons are likely to be landed from ships coming from foreign shall, with the approval of the Chief Officer of Customs of the port, fix some



place where any ship may be moored or anchored for the purpose of Article 10 ; *and shall make* provision for the reception of patients and persons suffering from Cholera, Yellow Fever, and Plague, and removed under Articles 13 and 14. The place to be fixed as aforesaid, where any ship may be moored or anchored for the purpose of Article 10, shall be some place within the jurisdiction or district of the Sanitary Authority, unless We otherwise consent ; in which case the place so fixed shall, for the purposes of this Order, be deemed to be within such jurisdiction or district.

\* Art. 7.—The Sanitary Authority, on notice being given to them by an Officer of Customs, under Article 4, shall forthwith cause the ship in regard to which such notice shall have been given, to be visited and examined by their Medical Officer of Health for the purpose of ascertaining whether such ship is infected.

*Visiting Vessels, with or without Notice.*

\* Art. 8.—The Medical Officer of Health, if he has reason to suspect that any ship coming or being within the jurisdiction or district of the Sanitary Authority, *whether examined by the Officer of Customs* or not, is infected, *shall*, or, if he have reason to suspect that the ship has come from an infected place, may visit and examine such ship for the purpose of ascertaining whether such ship is infected ; and may make the like visit and examination in the case of any ship coming or being within the jurisdiction of the Sanitary Authority which has come from an infected place. The Master of any such ship shall permit the same to be so visited and examined.

\* The Port Medical Officer endeavours as far as practicable to board vessels from infected districts in company with Customs.

*Master to Moor or Anchor Vessel.*

The Master of any such ship shall also, on being required so to do by the Medical Officer of Health, cause the ship to be brought to, and, if necessary, moored or anchored in some

convenient place while the same shall be visited and examined ; but due regard shall be had to the safety of the ship and to the convenience of navigation.

*Certifying Ship Infected.*

Art. 9.—If the Medical Officer of Health on making such Examination as aforesaid (whether under Article 7 or under Article 8) shall be of opinion that the ship is infected, he shall forthwith give a certificate in duplicate in the following Form, or to the like effect, and shall deliver one copy to the Master, and retain the other copy or transmit it to the Sanitary Authority. He shall also give to the Local Government Board information as to the arrival of the ship, and such other particulars as We may require.

CERTIFICATE.

..... day of ....., 189 .

..... DISTRICT [*or* TOWN] COUNCIL.

or

..... PORT SANITARY AUTHORITY.

I hereby certify that I have examined the ship.  
of ....., now lying in the Port of  
[*or detained at* .....], and I find that such ship is  
infected with [Cholera, *or* Yellow Fever, *or* Plague].

.....

*Medical Officer of Health*

[*or* Medical Practitioner appointed or employed  
by the Sanitary Authority].

*Detention of Vessels.*

Art. 10.—The Master of any ship so certified to be infected shall thereupon moor or anchor such ship at the place fixed for that purpose under Article 6, and such ship shall remain there until the requirements of this Order have been duly fulfilled.



*Persons Prohibited to Leave Ship.*

Art. 11.—No person (other than an Officer of Customs or a person acting in the execution of this Order) shall leave any such ship until the examination hereinafter mentioned shall have been made.

*Medical Examination of Persons on Board.*

Art. 12.—The Medical Officer of Health shall, as soon as possible after any such ship has been certified to be infected, examine every person on board the same, and in the case of any person suffering from Cholera, Yellow Fever, or Plague, or from any illness which the Medical Officer suspects may prove to be Cholera, Yellow Fever, or Plague, shall certify accordingly.

*Removal of Sick, and Detention in Hospital.*

Art. 13.—Every person certified by the Medical Officer of Health to be suffering from Cholera, Yellow Fever, or Plague shall be removed, if his condition admit of it, to some hospital or other suitable place appointed for that purpose by the Sanitary Authority ; and no person so removed shall leave such hospital or place until the Medical Officer of Health shall have certified that such person is free from the said disease.

If any person so certified to be suffering from Cholera, Yellow Fever, or Plague cannot be removed, the ship shall remain subject, for the purposes of this Order, to the control of the Medical Officer of Health ; and such person shall not be removed from or leave the ship, except with the consent in writing of the Medical Officer of Health.

*Detention of Suspected Cases.*

Art. 14.—Any person certified by the Medical Officer of Health to be suffering from any illness which such Officer suspects may prove to be Cholera, Yellow Fever, or Plague, may either be detained on board the ship for any period not exceeding two days, or be taken to some hospital or other

suitable place appointed for that purpose by the Sanitary Authority, and detained there for a like period, in order that it may be ascertained whether the illness is or is not Cholera, Yellow Fever, or Plague.

If any such person, while so detained, shall be certified by the Medical Officer of Health to be suffering from Cholera, Yellow Fever, or Plague, the provisions of Article 13 shall apply.

*Persons to give names and places of destination.*

Art. 15.—No person on board such a ship as is mentioned in Article 12 who has not been certified as required by that Article shall be permitted to land unless he satisfy the Medical Officer as to his name, intended place of destination, and intended address at such place.

Such name, intended place of destination, and address shall forthwith be given by the Medical Officer of Health to the Clerk to the Sanitary Authority, and such Clerk shall thereupon transmit the same to the Local Authority of the District in which such intended place of destination is situate.

*Change of Address.*

Every such person who, within forty-eight hours after landing, shall arrive at any place of destination or address other than such place or address as aforesaid, shall forthwith upon such arrival notify in writing his place of destination and address to the Medical Officer of Health of the Sanitary Authority, or to the Local Authority of the District in which such place is situate.

*The Master to execute directions of Medical Officer.*

Art. 16.—The Medical Officer of Health shall, in the case of every ship certified to be infected, give directions, and take such steps as may appear to him to be necessary, for preventing the spread of infection, and the Master of the said ship shall forthwith carry into execution such directions as shall be so given to him.

*Method of Burial.*

Art. 17.—In the event of any death from Cholera, Yellow Fever, or Plague taking place on board such ship while detained under Article 10, the Master shall, as directed by the Sanitary Authority or the Medical Officer of Health, either cause the dead body to be taken out to sea, and committed to the deep, properly loaded to prevent its rising, or shall deliver it into the charge of the said Authority, who shall thereupon cause the same to be otherwise lawfully and properly disposed of.

Articles 18, 19, 20, and 21, provide for the disinfection of ships and articles contained therein, according to the direction of the Medical Officer of Health, for procuring the names and destination of passengers or crew leaving the vessel.

Art. 22 gives power to Medical Officer of Health to order the pumping out of bilge water and ballast tanks in some suitable place.

*The Master and others to answer truly all questions.*

Art. 23.—The Master of any ship, or any other person, shall answer truly all such questions put to him by and give all such information to any Officer of Customs or Medical Officer of Health as may be necessary for any purpose of this Order ; and no person who is required in pursuance of this Order to give to the Medical Officer of Health or to notify to any Local Authority the name, and intended place of destination and address of such person shall knowingly give or notify a false or fictitious name, place of destination or address, or refuse to give or notify as aforesaid the true name, intended place of destination and address of such person.

*Infected Ships to hoist a Flag.*

Art. 25.—The Master of every ship infected with Cholera, Yellow Fever, or Plague shall, when within three miles of the coast of any part of England or Wales, cause to be hoisted at



the masthead, or where best seen, a large flag of yellow and black, borne quarterly, and shall keep the same displayed during the whole of the time between sunrise and sunset, and no person (other than an Officer of Customs or a person acting in the execution of this Order) shall leave such ship until after such visit of the Officer of Customs as is mentioned in Article 2, or until after the visit of the Medical Officer of Health in pursuance of Article 8.

*Penalties.*

NOTICE.—The Public Health Act, 1896, provides by sub-section (3) of Section 1, that if any person wilfully neglects or refuses to obey or carry out, or obstructs the execution of, any regulation made under section one hundred and thirty of the Public Health Act, 1875, or in pursuance of that section as extended to London by the Public Health (London) Act, 1891, and as amended by the Public Health Act, 1896, he shall be liable to a penalty not exceeding One Hundred Pounds, and in the case of a continuing offence to a further penalty not exceeding Fifty Pounds for every day during which the offence continues.

## DETAILS OF SICKNESS.

The medical certificates before referred to, on examination, show that during the voyage, cases of an unimportant character being general or non-infectious ailments, or of more important moment, such as infectious diseases, have occurred.

The following table shows the yearly summary of the zymotic or infectious diseases reported on arrival, together with steps taken for their isolation, and the protection of the inhabitants.

The total number of zymotic diseases reported, amounted to 87.

## TABLE

## ZYMOTIC

The following Table gives the particulars of Vessels  
Disease on Board, with the

Date.		Name of Vessel.	Where from.	Nature of Sickness.
January	3...	S.S. Clyde	Buenos Ayres	Two cases of Small Pox
January	4...	S.S. Norman	Cape Town	Remittent Fever
January	18...	S.S. Magdalena	Brazils	Varicella
January	22...	S.S. Para	Colon	20 cases of Measles
January	24...	S.S. Tamar	Brazils	Several cases of Measles
January	27...	S.S. Pretoria	Cape Town	Typhoid Fever
January	27...	Cock of the Walk	London	Small Pox
February	3...	S.S. Danube	River Plate	Yellow Fever
February	4...	S.S. Moor	Cape Town	Remittent Fever
*February	12...	Innocenta (sail)	New York	Two cases of Typhoid
February	19...	S.S. Atrato	West Indies	Malarial Fever
February	26...	S.S. Tagus	Brazil	Puerperal Fever
February	29...	S.S. Nile	Brazil	Malarial Fever
March	5...	S.S. Medway	West Indies	Continued Fever
March	19...	S.S. Don	West Indies	Measles
March	25...	S.S. St. Paul	New York	Three cases of Measles

\* This Vessel arrived January 27th, all well.



C.

## DISEASES.

reported on arrival as having, or having had, Zymotic measures adopted in each case.

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### REMARKS.

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Letter from Agents two days before ship's arrival, explained cases were on outward voyage and were landed at Rio, Dec. 2nd. Disinfection was carried out.

Recovered on arrival.

Recovered Dec. 18th. Cabin disinfected.

These occurred on outward voyage landed at Colon. Infected portions of ship disinfected.

Recovered before arrival. Cabin disinfected.

Port Medical Officer examined patient, and arranged for removal to Royal South Hants Infirmary. Cabins and effects disinfected.

Removed to Port Sanitorium. Forecastle and effects disinfected.

Died Jan. 4th. Ship disinfected.

Died at sea.

Ship laying off Netley. Cases removed to Royal South Hants Infirmary. See special note.

Recovered on arrival.

Died at sea. Disinfection carried out.

Recovered on arrival.

Special railway carriage provided for transit. Cabin disinfected.

Recovered. Cabins and contents disinfected.

Date.		Name of Vessel.	Where from.	Nature of Sickness.
April	1...	S.S. Dilwara	Bombay	Small Pox
April	8...	S.S. Prince Hendrick	China	Diphtheria
April	11...	S.S. Danube	Brazil	Typhoid Fever
April	27...	S.S. Athenian	Cape Town	Typhoid Fever
April	27...	S.S. Atrato	West Indies	Two cases of Malarial Fever
May	8...	S.S. Tagus	Brazil	Measles
May	9...	S.S. Nile	Brazil	Two cases of Remittent Fever
May	22...	S.S. Clyde	Brazil	Yellow Fever
June	3...	S.S. Magdalena	Brazil	Small Pox
June	3...	S.S. Goth	Cape Town	Three cases of Varicella
June	7...	S.S. Tartar	Cape Town	Typhoid Fever
June	10...	S.S. Don	West Indies	Typhoid Fever and Measles
June	21...	S.S. Moor	Cape Town	Remittent Fever
June	27...	S.S. Gaul	Cape Town	Typhoid Fever, also three cases Varicella
July	5...	S.S. Athenian	Cape Town	Two cases of Erysipelas Five cases of Malarial Fever
July	23...	S.S. Medway	West Indies	Typhoid Fever

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REMARKS.

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The patient, a Lascar, was removed to Hospital. All infected articles were disinfected. See text.

Landed at previous Port.

Landed at Lisbon. Bedding and cabin disinfected.

Case sufficiently recovered to proceed. Bedding and cabin disinfected.

Recovered on arrival.

Recovered on arrival.

One of which died at sea.

Died before arrival, May 11th. Bedding and effects destroyed. Hospital disinfected by Ship's Surgeon.

Case removed off Netley and removed in steam ambulance to Hospital Ship. Attendants removed for disinfection. Bedding, hospital, &c., disinfected.

Recovered on arrival.

Died at sea. Cabin, &c., disinfected.

Typhoid, convalescent on arrival.

Measles could not be isolated. Shore Hospital inadequate. Floating Hospital containing small-pox. Special carriage obtained on Railway.

Removed by Port Sanitary Authority to R.S.H. Infirmary on arrival.

Typhoid case removed by Port Sanitary Authority to Royal South Hants Infirmary. Bedding and ship's hospital disinfected.

Recovered on arrival.

Landed at Plymouth. Cabin disinfected.

Date.		Name of Vessel.	Where from.	Nature of Sickness.
July	30...	S.S. Norman	Cape Town	Four cases of Measles, one Varicella
August	7...	S.S. Tagus	Brazil	Varicella
August	15...	S.S. Magdalena	Brazil	Measles
August	19...	S.S. St. Louis	New York	Malarial Fever
September	13...	S.S. Thames	Brazil	Small Pox
October	1...	S.S. Tamar	Brazil	Three cases of Measles
October	5...	S.S. Gaul	Cape Town	Diphtheria
October	29...	S.S. Para	West Indies	Four cases of Intermittent Fever
November	3...	S.S. La Plata	Brazil	Scarlet Fever
November	7...	S.S. Danube	Brazil	Measles
November	17...	S.S. Pretoria	Cape Town	Varicella
November	25...	S.S. Atrato	West Indies	Intermittent Fever
December	4...	S.S. Thames	Brazil	Scarlet Fever and Varicella

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REMARKS.

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One case of measles had recovered ; the remaining three the disease was at its height. No accommodation in Borough Hospital. While the Port Sanitary Authority were trying to obtain rooms the cases were taken to a house in the town. Cabins and bedding disinfected.

Landed at Rio.

Removed to supplementary Hospital Ship Wolf. Cabins and bedding disinfected.

Died at sea.

Vessel boarded by Medical Officer of Health off Netley. Found case had been landed at Vigo with attendant. Bedding, &c., removed to Disinfectory. Ship's hospital disinfected.

Recovered on outward voyage.

Recovered on arrival. Disinfection carried out.

Recovered.

Objections were raised to isolation at first. Ship's hospital and bedding disinfected. See text.

Convalescent. Disinfection carried out.

Recovered on arrival.

Convalescent.

Both cases well on arrival. Disinfection of hospital and bedding carried out.



**TABLE D.**  
**THE PRINCIPAL ZYMOTIC DISEASES.**

Reported to have existed on vessels bound for Southampton  
and detailed in Table C.

	1893	1894	1895	1896
Small Pox ... ..	4	4	4	6
Scarlet Fever ... ..	4	2	—	2
Typhoid Fever ... ..	5	10	4	10
Diphtheria ... ..	1	—	—	2
Measles ... ..	5	5	2	32
Puerperal Fever ... ..	—	—	—	1
Yellow Fever... ..	—	—	—	2

NOTE.—In addition to these, 2 cases of Erysipelas, 11 Varicella, 5 Remittent Fever, 12 Malarial Fever, and 2 cases of Pertussis, were reported during 1896.

### DEATHS AT SEA.

The following is a list of Deaths reported by vessels on arrival:—

Yellow Fever ... ..	2
Typhoid Fever ... ..	1
Remittent Fever ... ..	1
Malarial Fever ... ..	1
Puerperal Fever ... ..	1
Infantile Diarrhœa ... ..	1
Phthisis ... ..	5
Pneumonia ... ..	1
Heart Disease (Inquest) ... ..	3
Apoplexy ... ..	1
Meningitis ... ..	1
Multiple Neuritis ... ..	1
Gastritis ... ..	1
Cirrhosis of Liver ... ..	1
Bright's Disease ... ..	1
Total ... ..	22

## SMALL POX.

Six cases were reported on arrival, two of which occurred during the outward voyage, and four on vessels bound for Southampton. Of the latter number, one case was landed at Lisbon, the remaining three were dealt with on arrival as follows :—

CASE 1, JANUARY 27TH. This case developed after arrival in port from London. The patient, a sailor, was removed to the Port Sanatorium. The infected portion of the vessel and contents were disinfected.

CASE 2, APRIL 1ST.—A Lascar, forming one of the crew of the “Dilwara” (troopship), was taken ill seven days before arrival, during this period he was isolated in one of the ship’s boats. I am of opinion that the spread of the disease to the troops was only prevented by the thoughtful and careful isolation that was instituted on board. The patient died fourteen days after admission to the Southampton Port Sanatorium. The costs of maintenance and burial were recovered from the ship’s owners.

CASE 3, JUNE 3RD. The steam ship “Magdalena” brought up off Netley, having a case of confluent Small Pox on board. She was boarded by your Medical Officer, and the patient, a first class passenger, immediately removed in the Steam Ambulance to the Port Sanatorium. The persons who had been in attendance upon the patient, and all infected materials were also removed for disinfection. The infected portion of the ship was treated with compressed  $\text{SO}_2$  and sealed up ; the vessel proceeding to dock after a delay of forty minutes.

The expenses for maintenance of the patient were recovered from his parents.

## SCARLET FEVER.

Two cases only were reported on arrival, these were investigated by your Medical Officer.

CASE 1, NOVEMBER 3RD. The vessel arrived about 5 a.m. On visiting her, it was found that the ship's surgeon was suffering from Scarlet Fever, The onset of the illness was eight days before the ship's arrival. The doctor held that he had recovered, and produced a certificate from a medical practioner on board, stating that he was free from infection. The patient upon these grounds refused to be isolated, but consented to my making an examination, he was desquamating freely, which he himself admitted. The patient was instructed to remain in the ship's hospital until further notice. The whole of the facts were laid before the marine superintendent of the company in writing, a copy of which was delivered to the patient, resulting in his subsequent isolation, and the disinfection of the vessel and infected articles.

CASE 2, DECEMBER 4TH. On examination, it was found that the patient had recovered, and was free from infection. The case occurred on the outward voyage.

### TYPHOID FEVER.

Ten cases were reported on arrival, each case was investigated.

Four cases were immediately removed to the Royal South Hants Infirmary.

Two cases were sufficiently convalescent to permit of special arrangements being made for removal to their homes.

The remaining four cases had either recovered on arrival, or were landed at other ports.

An enquiry was made in each case as to the source of ship's water supply, whilst samples were submitted to examination with negative results. The ships water tanks were emptied and cleansed.

The following two cases of Typhoid Fever deserve special description :—

On the 27th of January, an Italian Barque, "Innocenta," arrived from New York in Southampton Water, and remained at anchor off Netley. She was visited by the Port Sanitary

Inspector, and reported to be all well. Sixteen days after her arrival, February 12th, the local agents notified the existance of illness on board. Your Medical Officer proceeded in the steam ambulance to Netley, and found two men, one a sailor, the other an apprentice, presenting all the symptoms of Typhoid Fever, with temperatures respectively of  $104^{\circ}$  and  $105^{\circ}$  Fah. The patients were removed the same day to the Royal South Hants Infirmary. The apprentice dying five days after admission.

One other member of the crew complained of fever, diarrhœa, and vomiting. He was medically examined and found to be suffering from gastritis. The remaining members of the crew and master were apparently in good health. With a desire to discover the cause of the sickness, the following points were investigated, not without difficulty, the whole crew being Italians.

**WATER SUPPLY.**—The water was obtained in New York. No other supply had been used for several weeks. Samples were taken, examined, and subsequently pronounced of good quality. Had it been otherwise, one would assume its effects would have asserted themselves earlier.

**FOOD.**—The food of the crew consisted chiefly of cereals, biscuits, soups, vegetables, and salt meat. Since January 27th, fresh meat and bread had been obtained from Southampton. The food supplies were examined and found satisfactory.

Further investigation elicited the following important evidence. On February 5th, some members of the crew went for a row in one of the ship's boats up the River Itchen, and while there they collected a large quantity of mussels from wooden posts in the immediate vicinity of the town main sewage outfall. The same day several of the crew ate of the mussels brought to the ship. It was not until February 11th that any of the crew who had partaken of the mussels referred to, felt any indisposition. Three of the crew were then affected with diarrhœa and vomiting, including the two men who were



removed to the Infirmary. Of the two men who were removed on the 12th of February, to the Royal South Hants Infirmary, one recovered, while the second, the apprentice, died on the 17th of the same month. A post-mortem examination was made the same day by Dr. W. P. Purvis, the resident Medical Superintendent, to whom I am indebted for the following notes.

“Post-mortem notes of F. d'A.—Age 16, admitted for Typhoid Fever from ship “Innocenta” February 12th, 1896. Died February 17th, 2 a.m.”

“A male body, well formed and well nourished. *Intestines*—Upper part quite normal in appearance. Passing downwards, mucous membrane gradually became more and more red, the solitary glands, at first just visible, gradually became very large, till at the lower end of ileum they were as large as small shot and hard. Here Peyer's patches were very much swollen and prominent, the lowest were black on the surface as if sloughing had begun. There were small sloughs right up to the edge of the ileo cœcal valve, where they stopped abruptly.”

“The mesenteric glands draining the affected parts of the intestines were enormously enlarged, homogeneous and grey in colour, on section.”

“*Spleen*.—This was enlarged. Not particularly soft.”

“*Liver*.—Adherent to diaphragm.”

All other other organs appeared quite normal. There appears very strong reasons for concluding that the consumption of sewage contaminated mussels collected in the River Itchen was the cause of the sickness herein reported. Returning for a moment to the man who was not so seriously affected, he was kept under medical treatment and observation for some days on the ship and recovered.

Other Zymotic Diseases were reported and dealt with in the usual manner, details of which will be found in Table C. The total number amounted to 87.



## CHOLERA.

In January, Cholera was reported to exist at Constantinople and Alexandria, in consequence of which the following circular was issued at my request :—

## County Borough of Southampton.

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 PORT SANITARY AUTHORITY.
 

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 CHOLERA
 

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NOTICE IS HEREBY GIVEN to all SHIPOWNERS, MASTERS, and PILOTS,—That at a Meeting of the Port Sanitary Authority, held this day, instructions were given to the Port Medical Officer to enforce the various Orders and Regulations of the Local Government Board relating to Cholera, with a view of preventing the importation of the Disease into the Port of Southampton.

All Vessels arriving from—

ALL PORTS IN THE BLACK SEA,  
 CONSTANTINOPLE,  
 AND ALEXANDRIA,

must bring up off Netley, and there await examination by the Port Medical Officer or his assistants. Any person infringing these Regulations, or any other Regulations for the time being in force, will render himself liable to the penalties prescribed by law.

BY ORDER,

GEORGE B. NALDER,

*Town Clerk, and Clerk to the  
 Port Sanitary Authority..*

DATED JANUARY 22ND, 1896.

Following the foregoing notice, vessels arriving from places named therein were boarded off Netley and medically inspected before proceeding to dock.

The chief vessels arriving were grain steamers, and a regular line of steamers calling here from Alexandria and Mediterranean Ports.

The inspection ceased in March, when there was reason to believe the restricted ports were no longer infected.

### FLOATING HOSPITALS.

PORT SANITORIUM "ADELAIDE." During the year under review, as well as in previous years, the Port Sanatorium has been of great service to the Port and Borough alike.

In 1895, a large number of scarlet fever patients from the town were isolated upon the "Adelaide," in order to relieve the great demand upon the inadequate Borough Hospital.

On Sunday, 5th January, 1896, a case of small pox required immediate isolation, necessitating the speedy clearance and disinfection of the "Adelaide" for its reception.

This Hospital continued to be used for sporadic cases of small pox from this date until the month of August.

The demand for admission of scarlet fever cases to the Borough Hospital became more pressing than ever, and on the Port Sanitary Authority hiring a ship, the "Wolf," to supplement the "Adelaide" for emergencies, the permanent floating hospital was again disinfected, and on the 27th August used for scarlet fever cases from the borough.

HOSPITAL SHIP "WOLF." This vessel has been hired temporarily to enable the Port Sanitary Authority to deal efficiently with any emergency that may arise. I am of opinion that inasmuch as the hiring has been arranged on most favourable terms, she should be retained until the building of the new Borough Hospital is completed.

## ADMISSIONS TO FLOATING HOSPITALS, 1896.

*Scarlet Fever.*—92 cases were admitted from the 27th of August until the 31st of December.

*Measles.*—One case from Brazil.

*Small Pox.*—Eleven cases from the 6th of January until August. It is impossible to estimate the value and safeguard the Sanatorium has been in isolating cases of small pox, more especially in the removal of cases from shore. In consequence of the situation of the Sanatorium, the isolation was rendered perfect. Had we been without such means of isolation, it is possible, and most probable, that the few cases would have led to a serious outbreak, we should have been totally without hospital accommodation, the shore hospital being filled with scarlet fever. Such evidence of the utility and service of the Port Sanatorium should surely prove to the public the wisdom the Sanitary Authority displayed in establishing this hospital in 1893.

## GENERAL PORT INSPECTION.

**TABLE E.**

Table showing the total number of vessels inspected, with nationality, description, and number defective, during the year.

Nationality.	Steam.	Sail.	Total.	Defective.
American ...	60	nil.	60	9
British ...	3,142	1,879	5,021	86
Dutch ...	56	2	58	nil.
Danish ...	90	6	96	1
French ...	1	14	15	3
German ...	73	4	77	nil.
Greek ...	1	nil.	1	nil.
Italian ...	nil.	1	1	1
Norwegian ...	8	35	43	1
Russian ...	1	16	17	3
Swedish ...	10	5	15	1
Total ...	3,442	1,962	5,404	105

TABLE F.

Showing number of vessels inspected, with per centage of defects.

Date.	Foreign Vessels Visited.	Coasting Vessels Visited.	Total Inspections.	Number found Defective.	Defective per centage
1890	1,750	3,570	5,320	75	1·4
1891	1,755	3,840	5,595	88	1·5
1892	1,788	2,819	4,607	57	1·2
1893	2,976	2,513	5,489	162	2·95
1894	2,196	4,190	6,386	239	3·74
1895	2,212	3,822	6,034	111	1·83
1896	2,312	3,196	*5,508	105	1·9

\* Includes 104 re-visits.

INSPECTION OF VESSELS:—As in previous years the majority of vessels arriving in the port have been inspected by the Officers of the Port Sanitary Authority. Both passenger and cargo vessels entering the docks are boarded and examined immediately they arrive alongside the quays. Vessels which only discharge passengers off Hamble are waited upon by tenders ; an Officer of the Sanitary Authority accompanies each tender and receives a report as to the health of the persons on on board, but more particularly of those who are to be landed at Southampton. In many instances the steam ambulance accompanies the tender in readiness to remove any infectious disease that may exist, without causing delay to the vessel. In the event of sailing vessels not entering dock, and vessels proceeding to Eling, Redbridge, Bursledon, or other portions of the Port Sanitary District, they are examined as soon after their arrival as possible.

The number of inspections during the year 1896 amounted to 5,508 ; of this number 104 must be considered as revisits.

As a result of the general inspection, many unimportant nuisances were discovered and abated by verbal request. Nuisances of an important character were reported in respect of 105 vessels; these were abated by notices, except in 17 instances, where vessels sailed before the time allowed in legal notice



expired. The Port Medical Authorities of the port for which such vessels sailed were communicated with. The nuisances principally complained of were as follows:—uncleanly forecastles; storage of ships' gear, paint, &c., in fore-castle; damp forecastles, due to uncovered iron decks; insufficient ventilation; uncleanly water tanks; deposits of decomposing vegetables, &c.

Cases of sickness notified by vessels on arrival, or cases discovered on vessels after arrival, during their stay in dock, received attention as previously set out in this report.

### WATER SUPPLY TO SHIPS.

During the year it has been our practice to frequently collect samples of water from passenger vessels, submitting the same to the Public Analyst. In the event of his report being unsatisfactory, the owners have been requested to cleanse and empty the tanks and substitute a fresh supply.

### WATER BOATS.

These have been repeatedly examined and cleansed. The owners continue to obtain their supplies from the Town or South Hants Water Company.

### SOUTHAMPTON AS A TROOPING PORT.

During the year the Port of Southampton has been chosen as the Port for the embarkation and disembarkation of troops.

The advent of all fresh shipping to the Port brings, no doubt, greater commercial prosperity. I need not remind the members of the Port Sanitary Authority, however, that it also brings greater risks of importation of infection to the Port, and consequently places upon them greater responsibilities in providing efficient accommodation for the infectious sick, and the necessary machinery to cope with any emergency that may



arise. We are, I think, well equipped, while the expenses of port administration are kept within the narrowest limits coincident with efficiency.

At the present time the arrival of troops from Bombay is one of serious moment to us, owing to the prevalence of plague. We have to guard not only our own interests and health, but we are bound to adopt measures to prevent the importation of the disease through our Port to inland towns.

In consequence of the abolition of quarantine in England, and the recent regulations of the Local Government Board, the duties of medical inspection of vessels from Bombay; the isolation of any cases of plague that may arrive; the detention of suspected cases; the necessary disinfection, &c., are now to be carried out by the Port Sanitary Authorities.

I have recently been in communication with the Military Authorities who have offered me the greatest assistance in efficiently carrying out the medical examination of every person arriving from Bombay.

The Troopships carry on an average between twelve and thirteen hundred troops, together with a crew of about 170, chiefly Lascars.

It has been arranged for a Military Medical Officer to be in Southampton the day before the expected arrival of the vessel, where he awaits until called by your Port Medical Officer on the vessel being signalled. The Military Medical Officer assists in the medical inspection, and several other details.

I have now had practical experience of the valuable and generous help given, which will be detailed in the next Annual Report, but before concluding I desire to most cordially thank the Military Officers and Customs for their courtesy and great help in carrying out my investigations and duties, which would have been most difficult but for their presence and assistance.

**TABLE G.**  
**TROOPSHIPS ARRIVING IN 1896.**

Date of Arrival.	Name of Ship.	Whence.	No. of Passengers (Troops).
3rd January, 1896	Britannia	Bombay	1456
31st     "     "	Dilwara	"	1360
3rd March     "	Britannia	"	1408
31st     "     "	Dilwara	"	1245
6th May     "	Clive	"	565
3rd November     "	Britannia	"	1323
14th     "     "	Victoria	"	482
29th     "     "	Dilwara	"	1358
11th December     "	Dunera	"	1176

LIST OF REGULAR PASSENGER STEAMERS SAILING  
TO AND FROM SOUTHAMPTON.

ROYAL MAIL STEAM PACKET COMPANY.

Sailing to and from—Buenos Ayres, Monte Video, Rio de Janerio, Bahia, Pernambuco, Lisbon, Vigo, West India Ports, Colon, Savanilla, Carthagenas, &c.

UNION STEAM SHIP COMPANY.

Sailing to and from—Delagoa Bay, Natal, East London, Port Elizabeth, Mossel Bay, Cape Town, St. Helena, Teneriffe, Madeira, &c.

AMERICAN LINE.

Sailing to and from—New York.

## CASTLE LINE ROYAL MAIL STEAMERS.

Sailing to—Grand Canary, Cape Town, Algoa Bay, East London, Natal, Delagoa Bay, &c.

## NORTH GERMAN LLOYD.

Sailing to and from—Sydney, Melbourne, Adelaide, Genoa, Naples, Port Said, Suez, Aden, Colombo, Singapore, Hong Kong, Shanghai, Japan, New York, Buenos Ayres, Monte Video, Las Palmas, Vigo, Antwerp, Bremen, &c.

## HAMBURG-AMERICAN LINE.

Sailing to and from—Hamburg and New York.

## “NEDERLAND” STEAM SHIP COMPANY.

Sailing to and from—Genoa, Batavia, Sourabaya, Samarang, Padang, Amsterdam, &c.

## ROTTERDAMSCH LLOYD STEAM SHIP COMPANY.

Sailing to and from—Marseilles, Padang, Batavia, Cheribon, Samarang, Sourabaya, Macassar, Amsterdam, &c.

## GENERAL STEAM NAVIGATION COMPANY.

Sailing to and from—Bordeaux, Charante, &c.

## UNITED STEAM SHIP COMPANY OF COPENHAGEN.

Sailing to and from—Valencia, Messina, Tarragona, Barcelona, Genoa, Leghorn, Naples, Malaga, Cadiz, Copenhagen, and Baltic Ports.

## BRITISH AND IRISH STEAM PACKET COMPANY.

Sailing to and from—Dublin, Cork, &c.

## NIPPON YUSEN KAISHA.

Sailing to and from—Japanese Ports, Antwerp, &c.

## MOSS LINE, LIVERPOOL.

Carrying troops from—Alexandria, Malta, &c.

## CORK STEAM SHIP COMPANY.

Sailing to and from—Liverpool, Rotterdam, Antwerp, &c.

## LIVERPOOL, BRISTOL, AND LONDON STEAM SHIP COMPANY.

Sailing to and from—Manchester, Liverpool, Plymouth, &c.

## LONDON AND LIVERPOOL STEAM SHIP COMPANY.

Sailing to and from—London and Liverpool.

## CLYDE SHIPPING COMPANY.

Sailing to and from—Glasgow, Plymouth, Newhaven, Dover, London, &c.

## CITY OF CORK STEAM PACKET COMPANY.

Sailing to and from—Cork, Plymouth, London, &c.

## SOUTH-WESTERN STEAM PACKET COMPANY.

Sailing daily to and from—Jersey, Guernsey, St. Malo, Cherbourg, Havre, &c.

## CARGO STEAMERS.

In addition to the above, several lines of cargo steamers regularly use the Port.

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